

CLAIMS

1. A water purifying apparatus comprising:
a case;
a glass container, in which negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are contained, provided at an end portion of the case; and
a driving unit for causing the glass container to vibrate.
2. The water purifying apparatus according to Claim 1, wherein the glass container is of one of a cylindrical shape and a substantially conical shape, with an end thereof formed in one of a conical, curved, plain and spherical shapes.
3. The water purifying apparatus according to Claim 2, further comprising a cylindrical metal member for coating an outer circumferential surface of the glass container.
4. The water purifying apparatus according to Claim 2, further comprising a plurality of types of metal plates for coating an outer circumferential surface of the glass container, aligned in a circumferential direction of said glass container.
5. The water purifying apparatus according to Claim 1,

further comprising a cylindrical metal member for coating an outer circumferential surface of the glass container.

6. The water purifying apparatus according to Claim 1, further comprising a plurality of types of metal plates for coating an outer circumferential surface of the glass container, aligned in a circumferential direction of said glass container.

7. The water purifying apparatus according to Claim 1, further comprising in the glass container a glass container smaller than said glass container, in which the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are contained.

8. The water purifying apparatus according to Claim 1, wherein the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are produced by:

a first step of leaving grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe at rest in a place where a static electricity reducing/eliminating apparatus including a glass container, in which negatively charged grains of at least one of Si and SiO_x ($0 < x \leq 2$) are contained, is buried underground; and

a second step of sintering the grains of said material selected

from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe processed by the first step, for a predetermined time in the same place as the first step.

9. The water purifying apparatus according to Claim 1, wherein the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are produced by:

a first step of introducing grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe into a negatively charged quartz crucible; and

a second step of sintering the grains of said material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe processed by the first step, for a predetermined time in a place where a static electricity reducing/eliminating apparatus including a glass container, in which negatively charged grains of at least one of Si and SiO_x ($0 < x \leq 2$) are contained, is buried underground.

10. The water purifying apparatus according to Claim 1, wherein the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are produced by a process of leaving grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe at rest in a place where a static

electricity reducing/eliminating apparatus including a glass container, in which negatively charged grains of at least one of Si and SiO_x ($0 < x \leq 2$) are contained, is buried underground.

11. A water purifying apparatus comprising:

a case;

a glass container, in which negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are contained, provided at an end portion of the case; and

a driving unit for causing the glass container to rotate on an axis thereof.

12. The water purifying apparatus according to Claim 11, wherein the glass container is of one of a cylindrical shape and a substantially conical shape, with an end thereof formed in one of a conical, curved, plain and spherical shapes.

13. The water purifying apparatus according to Claim 12, further comprising a cylindrical metal member for coating an outer circumferential surface of the glass container.

14. The water purifying apparatus according to Claim 12, further comprising a plurality of types of metal plates for coating an outer circumferential surface of the glass container, aligned in a

circumferential direction of said glass container.

15. The water purifying apparatus according to Claim 11, further comprising a cylindrical metal member for coating an outer circumferential surface of the glass container.

16. The water purifying apparatus according to Claim 11, further comprising a plurality of types of metal plates for coating an outer circumferential surface of the glass container, aligned in a circumferential direction of said glass container.

17. The water purifying apparatus according to Claim 11, further comprising in the glass container a glass container smaller than said glass container, in which the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are contained.

18. The water purifying apparatus according to Claim 11, wherein the negatively charged grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are produced by:

a first step of leaving grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe at rest in a place where a static electricity reducing/eliminating apparatus including a glass container, in

which negatively charged grains of at least one of Si and SiOx ($0 < x \leq 2$) are contained, is buried underground; and

a second step of sintering the grains of said material selected from the group consisting of Si, SiOx ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe processed by the first step, for a predetermined time in the same place as the first step.

19. The water purifying apparatus according to Claim 11, wherein the negatively charged grains of material selected from the group consisting of Si, SiOx ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe are produced by:

a first step of introducing grains of material selected from the group consisting of Si, SiOx ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe into a negatively charged quartz crucible; and

a second step of sintering the grains of said material selected from the group consisting of Si, SiOx ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe processed by the first step, for a predetermined time in a place where a static electricity reducing/eliminating apparatus including a glass container, in which negatively charged grains of at least one of Si and SiOx ($0 < x \leq 2$) are contained, is buried underground.

20. The water purifying apparatus according to Claim 11, wherein said negatively charged grains of material selected from the group consisting of Si, SiOx ($0 < x \leq 2$), minerals, Al, P, Ge, Sn,

Pb, Ni and Fe are produced by a process of leaving grains of material selected from the group consisting of Si, SiO_x ($0 < x \leq 2$), minerals, Al, P, Ge, Sn, Pb, Ni and Fe at rest in a place where a static electricity reducing/eliminating apparatus including a glass container, in which negatively charged grains of at least one of Si and SiO_x ($0 < x \leq 2$) are contained, is buried underground.